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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/665,098

09/16/2003

Xiangzhong Wang

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08/09/2005

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EXAMINER

PASCAL, LESLIE C

ART UNIT

PAPER NUMBER

2633

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/665,098

Applicant(s)

WANG, XIANGZHONG

Examiner

Leslie Pascal

Art Unit

2633

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 7-5-05.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3,4 and 6-21 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☒ Claim(s) 6 and 11-16 is/are allowed.  
6) ☒ Claim(s) 1,3,4,6-10 and 17-21 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

Art Unit: 2633

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the term bi-lateral in claim 16 does not have proper antecedent basis in the specification. Although it appears to mean that there is two-way communication, which is shown in the drawings (so does not appear to be new matter), the term is not in the original specification. If the applicant means something other than two-way communication, it may be new matter.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 17-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Sekiya et al (6590686).

Sekiya et al teach means to control a laser (20, 22, 24, means to control a modulation module (118, 42), a temperature controller (30, column 4, lines 4-11), wavelength controller (26, 28, column 5, lines 45-52) and a current controlling supply means (20). In regard to the term bi-lateral, it would appear that there is bilateral communication based on column 4, lines 4-11.

In regard to claim 20, Sekiya teaches a laser module (2), a wavelength controller (26, 28) configured to receive a first signal (from 48) and generate a first control signal, a temperature controller (30) configured to receive the first control signal and a second signal (from the thermistor, column 4, line 7) and generate a second control signal (output of 30). In regard to claim 21, they teach that the current monitor sends a signal directly to the laser source (output between 26 and 2), which would be the third signal.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3-4, 7-10 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sekiya et al (US006590686) in view of Nagakubo (5900621).

Sekiya et al teach a temperature controller which has a temperature detection circuit (thermistor, column 4, line 7), a temperature control circuit (Peltier element which is a type of thermo-electric cooler, column 4, line 9), an output driving circuit (30), a modulator bias controller (42) and digital control (output of element 36 in figure 8), a modulator bias controller (42). Although Sekiya et al do not specifically teach a power controller controlling the modulator, Nagakubo et al (5900621) teach that it is well known to use a power controller (22, figure 16 or 23 in figure 17) in order to control the power output by the modulator. In regard to claims 10 and 8, he teaches a power monitoring circuit (15), power control circuit (12) and power driver (in that he has a drive signals for the attenuator, it is obvious, if not inherent that there is some means to

provide the drive signal within element 12). It would have been obvious to modify Sekiya et al with the power control means of Nagakubo in order to control fluctuations caused by the laser and modulator. In regard to claim 7, see element 20.

6. Claims 6 and 11-16 are allowed.

7. Applicant's arguments filed 7-5-05 have been fully considered but they are not persuasive. In regard to the applicant's arguments with respect to claim 17, it is unclear what the applicant feels if different about the claimed invention and Sekiya et al. In the description of the temperature control, Sekiya teaches that the thermister detects a signal from the laser and returns a control signal. This appears to be bi-lateral. In regard to the applicant's arguments with regard to claim 1, the applicant argues that Sekiya does not teach a PID with algorithm. This is not claimed in claim 1.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leslie Pascal whose telephone number is 571-272-3032. The examiner can normally be reached on Monday, Friday 6:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on 571-272-3022. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Leslie Pascal  
Primary Examiner  
Art Unit 2633